

**Title 33**  
**ENVIRONMENTAL QUALITY**

**Part XV. Radiation Protection**

**Chapter 4. Standards for Protection Against Radiation**

**Subchapter G. Precautionary Procedures**

**§455. Procedures for Receiving and Opening Packages**

A. – D. ...

1. removable radioactive surface contamination exceeds the limits of LAC 33:XV.1512.H.B.9; or

2. external radiation levels exceed the limits of LAC 33:XV.1512.I and J.B.10.

E. – F. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 19:1421 (November 1993), LR 22:973 (October 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2577 (November 2000), LR 28.

**Chapter 5. Radiation Safety Requirements for Industrial Radiographic Operations**

**Subchapter B. Personal Radiation Safety Requirements for Radiographers**

**§573. Conducting Industrial Radiographic Operations**

A. Whenever radiography is performed at a location other than a permanent radiographic installation, the radiographer must be accompanied by at least one other qualified radiographer or an individual if the radiographer is a qualified instructor, a qualified radiographer trainee or assistant, as required by who has, at a minimum, met the requirements of Subsection E D of this Section. The additional qualified individual shall observe the operations and be capable of providing immediate assistance to prevent unauthorized entry. Radiography may not be performed if only one qualified individual is present.

B. – E.3. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 27:1234 (August 2001), amended LR 28.

**§575. Training and Testing**

A. – C. ...

D. The licensee or registrant shall provide annual refresher safety training to all radiographers, radiographer assistants, and radiographer trainees at intervals not to exceed 12 months.

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**§577. Personnel Monitoring Control**

A. No licensee or registrant shall permit an individual to act as a radiographer, instructor, radiographer assistant, or radiographer trainee unless, at all times during radiographic operations, each such individual wears a direct-reading pocket dosimeter, an alarm ratemeter, and either a film badge, an optically-stimulated luminescence dosimeter (OSL), or a thermoluminescent dosimeter (TLD), except that for permanent radiography facilities where other appropriate alarming or warning devices are in routine use, the wearing of an alarming ratemeter is not required.

B. ...

C. Each film badge, TLD, or OSL shall be assigned to and worn by only one individual. Film badges, TLDs, and OSLs must be replaced at periods not to exceed one month. After replacement, each film badge, OSL, or TLD must be processed as soon as possible.

D. – H.4. ...

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HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2583 (November 2000), LR 27:1235 (August 2001), LR 28.

**Subchapter C. Precautionary Procedures in Radiographic Operations****§587. Radiation Surveys and Survey Records**

A. ...

B. A physical radiation survey shall be made after each radiographic exposure utilizing radiation machines or sealed sources to determine that the machine is "off" or that the sealed source has been returned to its shielded position ~~before exchanging films, repositioning the exposure head, or dismantling equipment.~~ immediately upon completion of exposure. The entire circumference or perimeter of the radiographic exposure device shall be surveyed. If the radiographic exposure device has a source guide tube, the survey shall also include the entire length of the guide tube.

C. – E. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2584 (November 2000), LR 27:1236 (August 2001), LR 28.

#### **§588. Documents and Records Required at Temporary Job Sites and Applicable Field Stations**

A. – A.7. ...

8. records of ~~equipment problems identified in~~ daily checks of equipment as required in LAC 33:XV.547;

A.9. – 11. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

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#### **§590. Specific Requirements for Radiographic Personnel Performing Industrial Radiography**

A. – D.2. ...

3. the radiographer's direct observation of the assistant's or trainee's performance of the operations referred to in this Section.

E. – F. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), amended LR 23:1139 (September 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2584 (November 2000), LR 27:1237 (August 2001), LR 28.

## **Chapter 6. X-rays in the Healing Arts**

### **§605. Fluoroscopic X-ray Systems**

A. - A.3.a.i.(a). ...

(b). when an optional high level control is provided. When so provided, the equipment shall not be operable at any combination of tube potential and current that will result in an exposure rate in excess of 5 roentgens (1.29  $\text{mR}/\text{kg}$ ) per minute at the point where the center of the useful beam enters the patient, unless high level control is activated. Special means of activation of high level controls shall be required. The high level control shall be operable only when continuous manual activation is provided by the operator. A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed; or

(c). when optional high level control is provided on equipment manufactured after May 19, 1995. When so provided, the equipment shall not be operable at any combination of tube and current that will result in an exposure rate in excess of 10 roentgens (2.58  $\text{mR}/\text{kg}$ ) per minute at the point where the center of the useful beam enters the patient, unless the high level control is activated. Special means of activation of high level control shall be required. The high level control shall only be operable when continuous manual activation is provided by the operator and the equipment shall not be operable at any combination of tube and current that will result in an exposure rate in excess of 20 roentgens (5.16  $\text{mR}/\text{kg}$ ) per minute at the point where the useful beam enters the patient. A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed.

A.3.a.ii. - A.10.b. ...

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## **Chapter 13. Licensing Requirements for Land Disposal of Radioactive Waste**

### **Subchapter C. Technical Requirements for Land Disposal Facilities**

#### **§1329. Requirements for Waste Classification and Characteristics**

A. Refer to LAC 33:XV.438, ~~439~~ and ~~440~~ Chapter 4, Appendix E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28.

## **Chapter 20. Radiation Safety Requirements for Wireline Service Operations and Subsurface Tracer Studies**

### **§2013. Radiation Survey Instruments**

A. The licensee or registrant shall maintain sufficient calibrated operable radiation survey instruments at each field station and temporary job site to make physical radiation surveys as required by this Chapter and by LAC 33:XV.426 and 430. Instrumentation shall be capable of measuring 0.001 mSv (0.1 mrem) per hour through at least 0.5 mSv (50 mrem) per hour.

B. – C. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

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